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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,177

02/09/2004

Gabi Elgressy

1543/6

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Gabi Elgressy  
Menachem Begin 6  
Kiryat Ono,,  
ISRAEL

02/20/2009

EXAMINER

PHASGE, ARUN S

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

02/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/773,177	<b>Applicant(s)</b> ELGRESSY, GABI	
	<b>Examiner</b> Arun S. Phasge	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 45-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

Claims 45-51, 53-63 and new claims 65-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over the E.S.T. Brochure in view of Rohrback and Elliott of record for reasons of record.

New claims 65-69 recite the functional language to the apparatus claims, “wherein said control system is adapted to activate said scraper to scrape said wall, when a measurement of an electrical property associated with a thickness of said scale deposition reaches a pre-determined value, and wherein, if prior to reaching said a pre-determined value, a pre-determined time from an immediately previous scraping is exceeded, said control system is adapted to activate said scraper to scrape said wall.

The combination of references teaching the control system shown by the Rohrback in view of Elliott patents, produces a structure which is capable of accomplishing the desired task

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Claims 52 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over the brochure in view of Rohrback and Elliott as applied to claims above, and further in view of Huba of record for reasons of record, wherein Huba teaches the use of constant current (see col 13, example 1).

### ***Response to Arguments***

Applicant's arguments filed 10/7/08 have been fully considered but they are not persuasive.

Applicant does not understand the language and the logic of the Examiner's argument.

The Brochure discloses the electrochemical device with the scraper means. The Rohrback discloses the control of a scraper to remove scale from a surface by the measurement of the thickness and resistivity (see col. 3, lines 38 to col. 4, line 60 and claim 25). The Elliott patent is cited to show the conventional techniques used in the art to remove scale by either observation (which would include the Rohrback techniques of monitoring the resistivity and thickness) or the use of a timer.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the brochure by the teachings of Rohrback and Elliott.

One having ordinary skill in the art would have been motivated to do this modification, because it has been well settled that such a combination of two techniques each of which is taught by the prior art to be useful for the same purpose, into a third

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technique which is to be used for the very same purpose would have been obvious to one having ordinary skill with the predictable result in the accomplishment of the same purpose.

Applicant further argues that each reference individually does not teach the limitations of the claims, by making the statement, Why doesn't Rohrback consider the use of a predetermined time to automatically trigger the scraper?. For those skilled in the art of electrochemical scale deposition, the reasons are straight forward and manifest:

time-based triggering is not based on any "on-line" monitoring of scale build-up, but, at best, on educated speculation on how thick the layer might be, as a function of time (e.g., based on some previous observation). Consequently, for processes that are particularly sensitive to scale thickness, time-based triggering is inferior to electrical resistance-based triggering, and a fortiori, to "on-line" electrical resistance-based monitoring and triggering.

Applicant has pointed out the deficiencies in each of the references. However, the rejection is based on the combination of references. The test of obviousness under 35 U.S.C. §103 is not the express suggestion of the claimed invention in any or all of the references, but what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them. *Ex parte Obiaya*, 227 U.S.P.Q. 59 BDAPP (1985). One cannot show non-obviousness by attacking the references individually where the rejection is based on a combination of references. *In re Young et al*, 159 U.S.P.Q. 725.

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“Applicant respectfully argues that the Examiner has not demonstrated a genuine advantage to controlling scale thickness by introducing - *in addition to* the more reliable, physically meaningful electrical resistance-based monitoring and triggering, a second, relatively primitive, non-physically meaningful, time-based parameter.” Applicants further allege other “host of practical and significant engineering considerations” to argue that the references teach away from the claimed invention.

The motivation for obviousness is not a “genuine advantage” is obtained by the combination, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Finally, Applicant respectfully submits that Elliott's art is significantly different from that of the instant invention. Elliott's art is the art of steam production using a boiler apparatus. The product -steam - is separated from the solid impurities by evaporation, and not necessarily by scale deposition. One skilled in the art will readily appreciate Elliott's tolerance for scale thickness would appear to be significantly higher than the tolerance in Rohrback or in the system of the present invention.

In response to applicant's argument that Elliott is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was

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concerned, in order to be relied upon as a basis for rejection of the claimed invention.

See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Elliott patent is reasonably pertinent to the problem of removal of scale from a surface by controlling the scraper.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Arun S. Phasge/  
Primary Examiner, Art Unit 1795

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